

**SANTA CLARA COUNTY ROADS AND AIRPORTS DEPARTMENT
WARRANTS FOR ALL-WAY STOP SIGN INSTALLATION
(Low Volume Streets)**

Location:

Date: 4/30/2018

San Martin Avenue
Major Street

Sycamore Avenue
Minor Street

All-way stop sign installation may be considered if **any** of the following conditions exist:

	<u>ADT</u>	<u>Yes/No</u>	<u>Warranted</u>
1. Volume			
a) The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 veh/hr. for any 8-hrs of an average day (24-hr equivalent of 2400 veh/day, minimum) if 70% 1680	8826	<u>YES</u>	YES
b) The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units/hr. for the same 8-hrs. (1600 veh/day, minimum) if 70% 1120	2202	<u>YES</u>	
c) When the 85th percentile approach speed exceeds 40 mph (65 km/h), the minimum vehicular volume warrant is 70% of the above requirements.	85 th % 52	<u>YES</u>	
2. Collisions	<u>No. of Coll.</u>		
Five or more accidents of types susceptible to correction by stop signs within a 12-month period, with satisfactory observance and enforcement of less restrictive control.	3	<u>NO</u>	NO
3. 80% Values for Volumes and Accidents (only if all below are met):	<u>ADT</u>		
a) 80% of 2400 veh/day = 1920	8826	<u>YES</u>	NO
b) 80% of 1600 veh/day = 1280	2202	<u>YES</u>	
c) 80% of five accidents = 4	3	<u>NO</u>	
4. Visibility	<u>Distance</u>		
The straight line sight distance on one or more approaches of the major street for vehicles or pedestrians crossing the intersection is less than 160 feet (50 m).	Good	<u>NO</u>	NO
5. Residential Area			<u>Yes/No</u>
Volume warrants to be reduced to 60% of the values above if all of the following conditions are met:			NO
a) Both streets have residential frontage with existing 25 MPH (40 km/h) speed limits.		Yes/No	
b) Neither street is an adopted through street.		Yes/No	
c) Neither street exceeds 40 feet (12.5 m) of roadway width.		Yes/No	
d) No existing stop sign or signal is located on the more heavily traveled street within a distance of 800 feet (250 m).		Yes/No	
e) The intersection has four legs, with streets extending 800 feet (250 m) or more away from the intersection on at least three sides.		Yes/No	
f) Installation of All-way stop is compatible with overall traffic circulation needs for the residential area.		Yes/No	

Warranted: Yes No

** SEE EXISTING CONDITIONS COMMENTS (DATA INPUT SHEET)

Prepared By Clarence Salim, PE
Reviewed By Ananth Prasad, PE
PE# C59176 Exp. 06/30/19

Date: 4/30/2018

Date: _____

**SANTA CLARA COUNTY ROADS AND AIRPORTS DEPARTMENT
WARRANTS FOR ALL-WAY STOP SIGN INSTALLATION
(Low Volume Streets)**

Location: Santa Teresa Boulevard
Major Street

San Martin Avenue
Minor Street

Date: 4/30/2018

All-way stop sign installation may be considered if **any** of the following conditions exist:

	<u>ADT</u>	<u>Yes/No</u>	<u>Warranted</u>
1. Volume			
a) The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 veh/hr. for any 8-hrs of an average day (24-hr equivalent of 2400 veh/day, minimum) if 70% 1680	9102	<u>YES</u>	YES
b) The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units/hr. for the same 8-hrs. (1600 veh/day, minimum) if 70% 1120	1673	<u>YES</u>	
c) When the 85th percentile approach speed exceeds 40 mph (65 km/h), the minimum vehicular volume warrant is 70% of the above requirements.	85 th % 52	<u>YES</u>	
2. Collisions	<u>No. of Coll.</u>		
Five or more accidents of types susceptible to correction by stop signs within a 12-month period, with satisfactory observance and enforcement of less restrictive control.	2	<u>NO</u>	NO
3. 80% Values for Volumes and Accidents (only if all below are met):	<u>ADT</u>		
a) 80% of 2400 veh/day = 1920	9102	<u>YES</u>	
b) 80% of 1600 veh/day = 1280	1673	<u>YES</u>	NO
c) 80% of five accidents = 4	2	<u>NO</u>	
4. Visibility	<u>Distance</u>		
The straight line sight distance on one or more approaches of the major street for vehicles or pedestrians crossing the intersection is less than 160 feet (50 m).	Good	<u>NO</u>	NO
5. Residential Area			<u>Yes/No</u>
Volume warrants to be reduced to 60% of the values above if all of the following conditions are met:			NO
a) Both streets have residential frontage with existing 25 MPH (40 km/h) speed limits.		Yes/No	
b) Neither street is an adopted through street.		Yes/No	
c) Neither street exceeds 40 feet (12.5 m) of roadway width.		Yes/No	
d) No existing stop sign or signal is located on the more heavily traveled street within a distance of 800 feet (250 m).		Yes/No	
e) The intersection has four legs, with streets extending 800 feet (250 m) or more away from the intersection on at least three sides.		Yes/No	
f) Installation of All-way stop is compatible with overall traffic circulation needs for the residential area.		Yes/No	

Warranted: Yes No

** SEE EXISTING CONDITIONS COMMENTS (DATA INPUT SHEET)

Prepared By Clarence Salim, PE
Reviewed By Ananth Prasad, PE
PE# C59176 Exp. 06/30/19

Date: 4/30/2018
Date: _____

**SANTA CLARA COUNTY ROADS AND AIRPORTS DEPARTMENT
WARRANTS FOR ALL-WAY STOP SIGN INSTALLATION
(Low Volume Streets)**

Location:
San Martin Avenue
 Major Street
Center Avenue
 Minor Street

Date: 4/30/2018

All-way stop sign installation may be considered if **any** of the following conditions exist:

	<u>ADT</u>	<u>Yes/No</u>	<u>Warranted</u>
1. Volume			
a) The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 veh/hr. for any 8-hrs of an average day (24-hr equivalent of 2400 veh/day, minimum) if 60% 1440	3693	<u>YES</u>	<u>YES</u>
b) The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units/hr. for the same 8-hrs. (1600 veh/day, minimum) if 60% 960	1316	<u>YES</u>	
c) When the 85th percentile approach speed exceeds 40 mph (65 km/h), the minimum vehicular volume warrant is 70% of the above requirements.	85 th % 43	<u>YES</u>	
2. Collisions	<u>No. of Coll.</u>		
Five or more accidents of types susceptible to correction by stop signs within a 12-month period, with satisfactory observance and enforcement of less restrictive control.	2	<u>NO</u>	<u>NO</u>
3. 80% Values for Volumes and Accidents (only if all below are met):	<u>ADT</u>		
a) 80% of 2400 veh/day = 1920	3693	<u>YES</u>	
b) 80% of 1600 veh/day = 1280	1316	<u>YES</u>	<u>NO</u>
c) 80% of five accidents = 4	2	<u>NO</u>	
4. Visibility	<u>Distance</u>		
The straight line sight distance on one or more approaches of the major street for vehicles or pedestrians crossing the intersection is less than 160 feet (50 m).	Good	<u>NO</u>	<u>NO</u>
5. Residential Area			<u>Yes/No</u>
Volume warrants to be reduced to 60% of the values above if all of the following conditions are met:			<u>YES</u>
a) Both streets have residential frontage with existing 25 MPH (40 km/h) speed limits.		Yes/No	
b) Neither street is an adopted through street.		Yes/No	
c) Neither street exceeds 40 feet (12.5 m) of roadway width.		Yes/No	
d) No existing stop sign or signal is located on the more heavily traveled street within a distance of 800 feet (250 m).		Yes/No	
e) The intersection has four legs, with streets extending 800 feet (250 m) or more away from the intersection on at least three sides.		Yes/No	
f) Installation of All-way stop is compatible with overall traffic circulation needs for the residential area.		Yes/No	

Warranted: Yes No

** SEE EXISTING CONDITIONS COMMENTS (DATA INPUT SHEET)

Prepared By Clarence Salim, PE
Reviewed By Ananth Prasad, PE
 PE# C59176 Exp. 06/30/19

Date: 4/30/2018
Date: _____

**SANTA CLARA COUNTY ROADS AND AIRPORTS DEPARTMENT
WARRANTS FOR ALL-WAY STOP SIGN INSTALLATION
(Low Volume Streets)**

Location:
 Middle Avenue
 Major Street
 Sycamore Avenue
 Minor Street

Date: 4/30/2018

All-way stop sign installation may be considered if **any** of the following conditions exist:

1. Volume	ADT	Yes/No	Warranted
a) The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 veh/hr. for any 8-hrs of an average day (24-hr equivalent of 2400 veh/day, minimum) if 60% 1440	2017	YES	YES
b) The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units/hr. for the same 8-hrs. (1600 veh/day, minimum) if 60% 960	1659	YES	
c) When the 85th percentile approach speed exceeds 40 mph (65 km/h), the minimum vehicular volume warrant is 70% of the above requirements.	85 th % 43	YES	
2. Collisions Five or more collisions of types susceptible to correction by stop signs within a 12-month period, with satisfactory observance and enforcement of less restrictive control.	No. of Coll. 2	NO	NO
3. 80% Values for Volumes and Accidents (only if all below are met):	ADT		
a) 80% of 2400 veh/day = 1920	2017	YES	
b) 80% of 1600 veh/day = 1280	1659	YES	NO
c) 80% of five accidents = 4	2	NO	
4. Visibility The straight line sight distance on one or more approaches of the major street for vehicles or pedestrians crossing the intersection is less than 160 feet (50 m).	Distance Good	NO	NO
5. Residential Area Volume warrants to be reduced to 60% of the values above if all of the following conditions are met:			Yes/No
a) Both streets have residential frontage with existing 25 MPH (40 km/h) speed limits.		Yes/No	YES
b) Neither street is an adopted through street.		Yes/No	
c) Neither street exceeds 40 feet (12.5 m) of roadway width.		Yes/No	
d) No existing stop sign or signal is located on the more heavily traveled street within a distance of 800 feet (250 m).		Yes/No	
e) The intersection has four legs, with streets extending 800 feet (250 m) or more away from the intersection on at least three sides.		Yes/No	
f) Installation of All-way stop is compatible with overall traffic circulation needs for the residential area.		Yes/No	

Warranted: Yes No

**** SEE EXISTING CONDITIONS COMMENTS (DATA INPUT SHEET)**

Prepared By Clarence Salim, PE
 Reviewed By Ananth Prasad, PE
 PE# C59176 Exp. 06/30/19

Date: 4/30/2018
 Date: _____

**SANTA CLARA COUNTY ROADS AND AIRPORTS DEPARTMENT
WARRANTS FOR ALL-WAY STOP SIGN INSTALLATION
(Low Volume Streets)**

Location:

 Middle Avenue
 Major Street

 Columbet Avenue
 Minor Street

Date: 4/30/2018

All-way stop sign installation may be considered if **any** of the following conditions exist:

1. Volume	ADT	Yes/No	Warranted
a) The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 veh/hr. for any 8-hrs of an average day (24-hr equivalent of 2400 veh/day, minimum) if 60% 1440	1558	YES	YES
b) The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units/hr. for the same 8-hrs. (1600 veh/day, minimum) if 60% 960	1517	YES	
c) When the 85th percentile approach speed exceeds 40 mph (65 km/h), the minimum vehicular volume warrant is 70% of the above requirements.	85 th % 47	YES	
2. Collisions Five or more collisions of types susceptible to correction by stop signs within a 12-month period, with satisfactory observance and enforcement of less restrictive control.	No. of Coll. 7	YES	YES
3. 80% Values for Volumes and Accidents (only if all below are met):	ADT		
a) 80% of 2400 veh/day = 1920	1558	NO	NO
b) 80% of 1600 veh/day = 1280	1517	YES	
c) 80% of five accidents = 4	7	YES	
4. Visibility The straight line sight distance on one or more approaches of the major street for vehicles or pedestrians crossing the intersection is less than 160 feet (50 m).	Distance Good	NO	NO
5. Residential Area Volume warrants to be reduced to 60% of the values above if all of the following conditions are met:			Yes/No
a) Both streets have residential frontage with existing 25 MPH (40 km/h) speed limits.		Yes/No	YES
b) Neither street is an adopted through street.		Yes/No	
c) Neither street exceeds 40 feet (12.5 m) of roadway width.		Yes/No	
d) No existing stop sign or signal is located on the more heavily traveled street within a distance of 800 feet (250 m).		Yes/No	
e) The intersection has four legs, with streets extending 800 feet (250 m) or more away from the intersection on at least three sides.		Yes/No	
f) Installation of All-way stop is compatible with overall traffic circulation needs for the residential area.		Yes/No	

Warranted: Yes No

**** SEE EXISTING CONDITIONS COMMENTS (DATA INPUT SHEET)**

Prepared By Clarence Salim, PE
Reviewed By Ananth Prasad, PE
 PE# C59176 Exp. 06/30/19

Date: 4/30/2018
Date: _____

**COUNTY OF SANTA CLARA ROADS AND AIRPORTS DEPARTMENT
WARRANTS FOR THREE-WAY STOP SIGN INSTALLATION
(Low Volume Streets)**

Location:

Date: 4/23/2018

Maple Avenue
Major Street

Hill Road
Minor Street

Three-way stop sign installation may be considered if **any** of the following conditions exist:

1. Volume	ADT	Yes/No	Warranted
a) Total vehicular volume entering the intersection from all approaches must average 500 vehicles per hour for any 6 hours of an average day. (24-hour equivalent of approximately 3000 vehicles) if 60% 1800	2504	<u>YES</u>	YES
b) In addition, the vehicular volume entering the intersection from the minor street or streets for the same 6 hours must average at least 1/3 of the total volume entering the intersection (200 per hour min.) if 60% 501	884	<u>YES</u>	
c) When the 85th percentile approach speed exceeds 64 km/h (40 MPH), the minimum vehicular volume warrant is 70% of the above requirements.	85 th % 47	<u>YES</u>	
2. Collisions Four or more collisions of types susceptible to correction by stop signs within a 12-month period, with satisfactory observance and enforcement of less restrictive control.	No. of Coll. 0	<u>NO</u>	NO
3. Visibility The straight line sight distance on one or more approaches of the major street for vehicles or pedestrians crossing the intersection is less than 160 ft (50 m) for 25 mph (40 km/hr)	Distance Good	<u>NO</u>	NO
4. Residential Area Volume warrants to be reduced to 60% of the values above if all of the following conditions are met: a) Both streets have residential frontage with existing 40 km/h (25 MPH) speed limits. b) Neither street is an adopted through street. c) Neither street exceeds 40 ft. (12.5 m) of roadway width. d) No existing stop sign or signal is located on the more heavily traveled street within a distance of 800 ft. (250 m) e) The intersection has three legs, with streets extending 800 ft. (250 m) or more away from the intersection on at least two sides. f) Installation of a three-way stop is compatible with overall traffic circulation needs for the residential area.	Notes	Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No	Yes/No YES

Warranted: Yes No

**** SEE EXISTING CONDITIONS COMMENTS (DATA INPUT SHEET)**

Prepared By Clarence Salim, PE
Reviewed By Ananth Prasad, PE
PE# C59176 Exp. 06/30/19

Date: 4/23/2018
Date: _____